

Abstract of the Disclosure

A rare earth garnet sintered compact which is produced by subjecting a rare earth garnet powder such as YAG to a pre-sintering, sintering the pre-sintered product by HIP, and annealing the sintered product at 1100°C to 1600°C in a whole oxygen atmosphere under a whole pressure of 4.5 MPa or more, and has an average crystallite diameter of 0.9 to 9 μm , an optical loss coefficient of 0.002 cm^{-1} or less and a strain of a transmitted wave of $0.05\lambda\text{ cm}^{-1}$ or less.